

WE CLAIM:
~~Patent claims~~

1. Method for producing a ceramic body (1), which has a monolithic multilayer structure and which contains at least one passive electronic module (15 - 20), comprising the method steps:

a) producing a green film containing a binder,

b) stacking at least one green film having a ceramic material made of glass ceramic, which becomes compacted at a first temperature interval, and at least one green film having a ceramic material made of glass ceramic, which becomes compacted at a temperature interval, which is different from the first temperature interval, to a stack,

c) laminating the stack to a composite,

d) ~~debinding~~ the composite at an increased temperature,

e) sintering the composite at a temperature of the first temperature interval until the ceramic material, which becomes compacted in this temperature interval, is mainly compacted, and

f) sintering the composite at a temperature of the temperature interval that is different from the first temperature interval until the ceramic material, which becomes compacted at the temperature interval that is different from the first temperature interval, is mainly compacted.

2. Method according to claim 1, whereby the stacking, laminating, ~~debinding~~ ^{removing} and/or sintering occurs in a matrix.

3. Method according to claim 1 ~~or 2~~, whereby at least one opening (63) is generated in a green film (61) and whereby the opening (63) is filled with an electrically conducting material

claim 3
 4. Method according to ~~one of the claims 1 to 3~~, whereby the opening ~~(63)~~ is generated by punching.

claim 3
 5. Method according to ~~one of the claims 1 to 4~~, whereby the opening is filled by means of a screen printing method.

claim 1
 6. Method according to ~~one of the claims 1 to 5~~, whereby an electrically conducting material is attached to a surface of a green film and/or the body.

7. Method according to claim 6, whereby the electrically conducting material is attached by means of silk screen process printing.

claim 1
 8. Method according to ~~one of the claims 1 to 7~~, whereby the stack is sintered onto a metal body.

comprising structure
 9. Ceramic body (1), ~~which has~~ a monolithic multilayer ~~structure~~ containing
 - at least one passive electronic module ~~(15, 20)~~,
 - at least one layer ~~(11, 12)~~ composed of a ~~first~~ ceramic material made of glass ceramic ~~(101)~~, which becomes compacted in a first temperature interval (201) and
 - at least one layer ~~(13, 14)~~ composed of a ~~second~~ ceramic material ~~(102)~~ made of glass ceramic, which becomes compacted at a temperature interval ~~(202)~~ that is different from the first temperature interval ~~(201)~~.

wherein the
 10. Body according to claim 9, ~~whereby a plurality of~~ ceramic materials exhibit an essentially identical coefficient of expansion at a specific temperature range.

which includes
 11. Body according to claim 9, ~~or 11~~, whereby a layer stack ~~(111)~~ having a layer sequence in a direction ~~(113)~~, and a layer stack ~~(112)~~ having the same layer sequence in opposite direction ~~(114)~~, are arranged on top of one another.

Sub A3 12. Body according to one of the claims 9 to 11, whereby a ceramic material (102) becomes compacted at the temperature interval between 720°C and 850°C.

13. Body according to one of the claims 9 to 12, whereby a ceramic material (101) becomes compacted at the temperature interval between 870°C and 970°C.

a sub B1 14. Body according to *claim 9, wherein* ~~one of the claims 9 to 13~~, whereby the body (1) comprises at least one layer composed of an electrode material (20).

a 10 15. Body according to *claim 14, wherein* ~~one of the claims 9 to 14~~, whereby the body (1) is arranged on a metal body.

a 16. Body according to *claim 15, wherein* ~~one of the claims 9 to 15~~, whereby the component part (15-19), the layer composed of an electrode material (20) and/or the metal body comprises at least one material, which is selected from the group gold, copper, molybdenum, palladium, platinum, silver and/or *tungsten* ~~wolfram~~. [sic]

17. Utilization of the body according to one of the claims 9 to 16 as a substrate of a high-frequency module.

Add A5 20